Exhibit I Query: SEQ ID NO: 7

# BLAST Basic Local Alignment Search Tool

· Your search parameters were adjusted to search for a short input sequence.

Edit and Resubmit Save Search Strategies. Formatting options Download

#### Nucleotide Sequence (17 letters)

Results for: Icl|11866 None(17bp)

Your BLAST job specified more than one input sequence. This box lets you choose which input sequence to show BLAST results for.

Query ID

c		11866
Description	None	
Molecule type	nucleic acid	
Query Length	17	

#### Database Name

Description

All GenBank+EMBL+DDBJ+PDB sequences (but no EST, STS, GSS,environmental samples or phase 0.1 or 2 HTGS sequences)

Program BLASTN 2.2.19+ Citation

Reference

Stephen F. Altschul, Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

Other reports: Search Summary [Taxonomy reports] [Distance tree of results]

## Search Parameters

Program	blastn
Word size	7
Expect value	1000
Hitlist size	100
Match/Mismatch scores	1,-3
Gapcosts	5,2
Filter string	F
Genetic Code	1

#### Database

Posted date	Dec 28, 2008 5:47 PM
Number of letters	252,991,180
Number of sequence	es 7,851,115
Entrez query	none

### Karlin-Altschul statistics

Params	Ungapped	Gapped
Lambda	1.37406	1.37406
K	0.710603	0.710603
Н	1.30725	1.30725

#### **Results Statistics**

Length adjustment	15
Effective length of query	2
Effective length of database	25605224455
Effective search space	51210448910
Effective search space used	51210448910

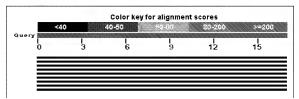
Designing or Testing PCR Primers? Try your s

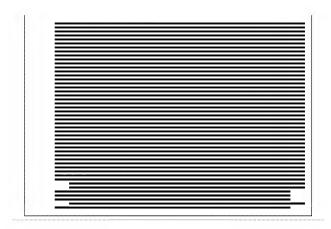
Graphic Summary

# Distribution of 129 Blast Hits on the Query Sequence

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An overview of the database sequences aligned to the query sequence is shown. The score of each alignment is indicated by one of five different colors, which divides the range of scores into five groups. Multiple alignments on the same database sequence are connected by a striped line. Mousing over a hit sequence causes the definition and score to be shown in the window at the top, clicking on a hit sequence aligned to the described alignments. New: This graphic is an overview of database sequences aligned to the query sequence. Alignments are color-coded by score, within one of five score ranges. Multiple alignments on the same database sequence are connected by a dashed line. Mousing over an alignment shows the alignment definition and score in the box at the top. Clicking an alignment displays the alignment definition and score in the box at the top. Clicking an alignment





### Descriptions

Legend for links to other resources: UniGene 🖾 GEO 🖸 Gene 💹 Structure 🚨 Map Viewer

	ucing significant alignments: to sort columns)				
NW_002196569.1	Ralstonia solanacearum IPO1609 >emb CU914168.1  Ralstonia solanacearum strain IPO1609 Genome Draft	34.2 34.2	100% 2.6	100%	
NW_002196522.1	Ralstonia solanacearum MolK2 >emb CU694390.1  Ralstonia solanacearum strain MolK2 Genome Draft	34.2 34.2	100% 2.6	100%	
XM_001915641.1	PREDICTED: Equus caballus similar to Glutathione peroxidase 2 (GSHPx-2) (GPx-2) (Glutathione peroxidase-gastrointestinal) (GSHPx-GI) (LOC100146145), mRNA	34.2 34.2	100% 2.6	100%	G
XM_001916096.1	PREDICTED: Equus caballus similar to glutathione peroxidase 1 (LOC100053396), mRNA	34.2 34.2	100% 2.6	100%	G
CP000958.1	Burkholderia cenocepacia MCO-3 chromosome 1, complete sequence	34.2 112	100% 2.6	100%	
NM_001115119.1	Canis lupus familiaris glutathione peroxidase 1 (GPX1), mRNA	34.2 34.2	100% 2.6	100%	A <sup>C</sup>
XR_038530.1	PREDICTED: Homo sapiens misc_RNA (LOC441481), miscRNA	34.2 34.2	100% 2.6	100%	Ö
XR_038228.1	PREDICTED: Homo sapiens misc_RNA (LOC441481), miscRNA	34.2 34.2	100% 2.6	100%	G
NM_001077512.2	Pan troglodytes glutathione peroxidase 1 (GPX1), mRNA	34.2 34.2	100% 2.6	100%	G
CP000458.1	Burkholderia cenocepacia HI2424 chromosome 1, complete sequence	34.2 112	100% 2.6	100%	
AK239914.1	Sus scrofa mRNA, clone:UTR010010G07, expressed in uterus	34.2 34.2	100% 2.6	100%	U
AK231261.1	Sus scrofa mRNA, clone:ITT010025D10, expressed in intestine	34.2 34.2	100% 2.6	100%	TO .
AB121000.1	Callithrix jacchus gpxl mRNA for glutathione peroxidase 1, complete cds	34.2 34.2	100% 2.6	100%	
AB120996.1	Pan troglodytes gpx1 mRNA for glutathione peroxidase 1, complete cds	34.2 34.2	100% 2.6	100%	Œ
CT573213.2	Frankia alni str. ACN14A chromosome, complete sequence	34.2 86.7	100% 2.6	100%	
AK225835.1	Homo sapiens mRNA for Glutathione peroxidase 1 variant, clone: FCC127C01	34.2 34.2	100% 2.6	100%	Œ
XR_013650.1	PREDICTED: Macaca mulatta similar to Glutathione peroxidase 1 (GSHPx-1) (GPx-1) (Cellular glutathione peroxidase) (LOC706732), mRNA	34.2 34.2	100% 2.6	100%	G
CP000380.1	Burkholderia cenocepacia AU 1054 chromosome 3, complete sequence	34.2 34.2	100% 2.6	100%	
AY966403.1	Callithrix jacchus cytosolic glutathione peroxidase (Gpx-1) mRNA, complete cds	34.2 34.2	100% 2.6	100%	
CP000151.1	Burkholderia sp. 383 chromosome 1, complete sequence	34.2 60.5	100% 2.6	100%	
BC007865.2	Homo sapiens glutathione peroxidase 1,	34.2 34.2	100% 2.6	100%	G

	mRNA (cDNA clone MGC:14399 IMAGE:4301275), complete cds	
BC000742.2	mRNA (cDNA clone MGC:2335 IMAGE:3505654), complete cds	34.2 34.2 100% 2.6 100%
BC070258.1	Homo sapiens glutathione peroxidase 1, mRNA (cDNA clone MGC:88245 IMAGE:6452792), complete cds	34.2 34.2 100% 2.6 100%
AY572225.1	Canis familiaris glutathione peroxidase 1 mRNA, partial cds	34.2 34.2 100% 2.6 100% <b>36</b>
AC135371.2	Homo sapiens X BAC RP11-142G7 (Roswell Park Cancer Institute Human BAC Library) complete sequence	34.2 34.2 100% 2.6 100%
AY327818.1	Homo sapiens glutathione peroxidase 1 (GPX1) gene, complete cds	34.2 34.2 100% 2.6 100% 🕝
NM_214201.1	Sus scrofa glutathione peroxidase 1 (GPX1), mRNA ygb AF532927.1  Sus scrofa cytosolic glutathione peroxidase (GPX1) mRNA, complete cds	34.2 34.2 100% 2.6 100%
AB120999.1	Cebus apella gpxl mRNA for glutathione peroxidase 1, complete cds	34.2 34.2 100% 2.6 100%
AB120998.1	Hylobates lar gpxl mRNA for glutathione peroxidase 1, complete cds	34.2 34.2 100% 2.6 100%
AB120997.1	Pongo pygmaeus gpxl mRNA for glutathione peroxidase 1, complete cds	34.2 34.2 100% 2.6 100%
DQ333996.1	Spermophilus parryii clone SP00035 glutathione peroxidase 1 mRNA, partial cds	34.2 34.2 100% 2.6 100%
M83094.1	Homo sapiens cytosolic selenium- dependent glutathione peroxidase gene, complete cds, and rhohl2 gene, 3' end	34.2 34.2 100% 2.6 100%
Y00483.1	Human gene for gluthathione peroxidase	34.2 34.2 100% 2.6 100% G
Y00433.1	Human mRNA for glutathione peroxidase (EC 1.11.1.9.)	34.2 34.2 100% 2.6 100%
X13710.1	H.sapiens unspliced mRNA for glutathione peroxidase	34.2 34.2 100% 2.6 100%
X13709.1	Human gpxl mRNA for gluthatione peroxidase	34.2 34.2 100% 2.6 100% <b>36</b>
NM_001085444.1	Oryctolagus cuniculus glutathione peroxidase 1 (GPXI), mRNA >emb[XI3837.1]OCGPO Rabbit mRNA for glutathione peroxidase (EC 1.11.1.9)	34.2 34.2 100% 2.6 100% G
M21304.1	Human glutathione peroxidase (GPX1) mRNA, complete cds	34.2 34.2 100% 2.6 100%
U39842.1	Cavia porcellus glutathione peroxidase mRNA, partial cds	34.2 34.2 100% 2.6 100%
CR626479.1	full-length cDNA clone CSOCAP001Y117 of Thymus of Homo sapiens (human)	34.2 34.2 100% 2.6 100%
CR620255.1	full-length cDNA clone CSODD004YA07 of Neuroblastoma Cot 50-normalized of Homo sapiens (human)	34.2 34.2 100% 2.6 100%
CR614747.1	full-length cDNA clone CSODIO86YP09 of Placenta Cot 25-normalized of Homo sapiens (human)	34.2 34.2 100% 2.6 100%
CR601795.1	full-length cDNA clone CSODI068YJ17 of	34.2 34.2 100% 2.6 100%

	Placenta Cot 25-normalized of Homo sapiens (human)					
CR595371.1	full-length cDNA clone CSODCO25YE23 of Neuroblastoma Cot 25-normalized of Homo sapiens (human)					
AK130160.1	Homo sapiens cDNA FLJ26650 fis, clone MPE04848, highly similar to Glutathione peroxidase (EC 1.11.1.9)	34.2 34.	2 100%	2.6	100%	U.G
AC121247.2	Homo sapiens chromosome 3 cione RP11- 3B7, complete sequence	34.2 34.	2 100%	2.6	100%	
AB105162.1	Macaca fuscata mRNA for cytosolic glutathione peroxidase, complete cds	34.2 34.	2 100%	2.6	100%	
NM_000581.2	Homo sapiens glutathione peroxidase 1 (GPX1), transcript variant 1, mRNA	34.2 34.	2 100%	2.6	100%	g a
NM_201397.1	Homo sapiens glutathione peroxidase 1 (GPX1), transcript variant 2, mRNA	34.2 34.	2 100%	2.6	100%	G
CP001111.1	Stenotrophomonas maltophilia R551-3, complete genome	32.2 32.	2 94%	10	100%	
AB098194.1	Codonosiga gracilis CgPTK-f mRNA for receptor-type protein tyrosine kinase, complete cds	32.2 32.	2 94%	10	100%	
CP000058.1	Pseudomonas syringae pv. phaseolicola 1448A, complete genome	32.2 32.	2 94%	10	100%	***************************************
AF396866.1	Bacteriophage Mx8, complete genome	32.2 32.	2 94%	10	100%	
BX950851.1	Erwinia carotovora subsp. atroseptica SCRI1043, complete genome	32.2 32.	2 94%	10	100%	
AY596297.1	Haloarcula marismortui ATCC 43049 chromosome I, complete sequence	32.2 84.	7 94%	10	100%	***************
AE015451.1	Pseudomonas putida KT2440 complete genome	32.2 32.	2 94%	10	100%	
J05222.1	Halobacterium marismortui ribosomal protein gene cluster	32.2 32.	2 94%	10	100%	
CP001322.1	Desulfatibacillum alkenivorans AK-01, complete genome	30.2 30.	2 88%	41	100%	******************
AM920436.1	Penicillium chrysogenum Wisconsin 54- 1255 complete genome, contig Pc00c21	30.2 84.	7 94%	41	100%	***************************************
AC232899.1	Oryza officinalis clone OO_Ba0111F15, complete sequence	30.2 30.	2 88%	41	100%	
AM747721.1	Burkholderia cenocepacia J2315 chromosome 2, complete genome	30.2 56.	5 94%	41	100%	***************************************
CP000854.1	Mycobacterium marinum M, complete genome	30.2 56.	5 88%	41	100%	
CP001026.1	Burkholderia ambifaria MC40-6 chromosome 2, complete sequence	30.2 56.	5 100%	41	100%	
NW_001914855.1	Podospora anserina DSM 980 genomic scaffold chrml_SC2 >emb CU633901.1  Podospora anserina genomic DNA chromosome 1, supercontig 2	30.2 30.	2 88%	41	100%	
CP000959.1	Burkholderia cenocepacia MCO-3 chromosome 2, complete sequence	30.2 30.	2 88%	41	100%	***************************************
XR_017747.2	PREDICTED: Homo sapiens misc_RNA (LCN1L1), miscRNA	30.2 30.	2 88%	41	100%	g
EU137666.1	Myxococcus fulvus strain 124B02 plasmid pMF1, complete sequence	30.2 30.	2 88%	41	100%	

# Designing or Testing PCR Primers? Try your s

Alignments Select All Get selected sequences Distance free of results

```
>ref|NW 002196569.1| Ralstonia solanacearum IP01609
 emb|CU914168.1| Ralstonia solanacearum strain IPO1609 Genome Draft
Length=3372855
 Features in this part of subject sequence:
   glutathione peroxidase protein
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
Query 1
                  CTCGGCTTCCCGTGCAA 17
Sbjct 2635709 CTCGGCTTCCCGTGCAA 2635693
>ref|NW_002196522.1| Ralstonia solanacearum MolK2
 emb|CU694390.1| Ralstonia solanacearum strain MolK2 Genome Draft
Length=237010
 Features in this part of subject sequence:
   glutathione peroxidase protein
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
                 CTCGGCTTCCCGTGCAA 17
Sbjct 131900 CTCGGCTTCCCGTGCAA 131916
>ref | XM 001915641.1 | PREDICTED: Equus caballus similar to Glutathione peroxida
(GSHPx-2) (GPx-2) (Glutathione peroxidase-gastrointestinal) (GSHPx-GI) (LOC100146145), mRNA
Length=573
GENE ID: 100146145 LOC100146145 | similar to Glutathione peroxidase 2 (GSHPx-2) (GPx-2) (Glutathione peroxidase-gastrointestinal) (GSHPx-GI) [Equus caballus]
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
              CTCGGCTTCCCGTGCAA 17
Query 1
Sbict 190 CTCGGCTTCCCGTGCAA 206
>ref | XM 001916096.1 | G PREDICTED: Equus caballus similar to glutathione peroxida
(LOC100053396), mRNA
```

```
Length=606
 GENE ID: 100053396 LOC100053396 | similar to glutathione peroxidase 1
[Equus caballus]
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1
             CTCGGCTTCCCGTGCAA 17
Sbict 214 CTCGGCTTCCCGTGCAA 230
>ab|CP000958.1| Burkholderia cenocepacia MC0-3 chromosome 1, complete sequence
Length=3532883
                                                              Sort alignments for this
                                                                E value Score Percen
                                                                Query start position
 Features in this part of subject sequence:
  Glutathione peroxidase
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
                 CTCGGCTTCCCGTGCAA 17
Sbjct 2284247 CTCGGCTTCCCGTGCAA 2284231
 Features in this part of subject sequence:
  short-chain dehydrogenase/reductase SDR
 Score = 26.3 bits (13), Expect = 636 Identities = 13/13 (100%), Gaps = 0/13 (0%)
 Strand=Plus/Minus
Query 3
                CGGCTTCCCGTGC 15
Features in this part of subject sequence:
   conserved hypothetical protein
 Score = 26.3 bits (13), Expect = 636 Identities = 16/17 (94%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
Query 1
                CTCGGCTTCCCGTGCAA 17
Sbjet 2872181 CTCGGCTTCGCGTGCAA 2872165
Features in this part of subject sequence:
  diguanylate cyclase
Score = 26.3 bits (13), Expect = 636 Identities = 13/13 (100%), Gaps = 0/13 (0%)
 Strand=Plus/Plus
Query 3
                CGGCTTCCCGTGC 15
Sbjct 3526443 CGGCTTCCCGTGC 3526455
>ref[NM 001115119.1] Canis lupus familiaris glutathione peroxidase 1 (GPX1
Length=838
 GENE ID: 442961 GPX1 | glutathione peroxidase 1 [Canis lupus familiaris]
```

```
Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
             CTCGGCTTCCCGTGCAA 17
Query 1
Sbjct 235 CTCGGCTTCCCGTGCAA 251
>ref|XR_038530.1| G PREDICTED: Homo sapiens misc_RNA (LOC441481), miscRNA
Length=876
GENE ID: 441481 LOC441481 | similar to Glutathione peroxidase 1 (GSHPx-1) (GPx-1) (Cellular glutathione peroxidase) [Homo sapiens]
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1
             CTCGGCTTCCCGTGCAA 17
Sbjet 253 CTCGGCTTCCCGTGCAA 269
>ref | XR 038228.1 | G PREDICTED: Homo sapiens misc RNA (LOC441481), miscRNA
Length=878
 GENE ID: 441481 LOC441481 | similar to Glutathione peroxidase 1 (GSHPx-1)
(GPx-1) (Cellular glutathione peroxidase) [Homo sapiens]
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbjct 255 CTCGGCTTCCCGTGCAA 271
>ref[NM_001077512.2]  Pan troglodytes glutathione peroxidase 1 (GPX1), mRNA
Length=613
 GENE ID: 461015 GPX1 | glutathione peroxidase 1 [Pan troglodytes]
(10 or fewer PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbict 221 CTCGGCTTCCCGTGCAA 237
>gb|CP000458.1| 💹 Burkholderia cenocepacia HI2424 chromosome 1, complete sequenc
Length=3483902
                                                                  Sort alignments for this
                                                                    E value Score Percen
                                                                    Query start position
 Features in this part of subject sequence:
   Glutathione peroxidase
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
Query 1
                  CTCGGCTTCCCGTGCAA 17
Sbjet 2258895 CTCGGCTTCCCGTGCAA 2258879
```

```
Features in this part of subject sequence:
   short-chain dehvdrogenase/reductase SDR
 Score = 26.3 bits (13), Expect = 636 Identities = 13/13 (100%), Gaps = 0/13 (0%)
 Strand=Plus/Minus
Ouerv 3
                 CGGCTTCCCGTGC 15
Sbjct 2528844 CGGCTTCCCGTGC 2528832
 Features in this part of subject sequence:
   conserved hypothetical protein
 Score = 26.3 bits (13), Expect = 636 Identities = 16/17 (94%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
Query 1
                  CTCGGCTTCCCGTGCAA 17
Sbjct 2825631 CTCGGCTTCGCGTGCAA 2825615
 Features in this part of subject sequence:
   conserved hypothetical protein
 Score = 26.3 bits (13), Expect = 636 Identities = 13/13 (100%), Gaps = 0/13 (0%)
 Strand=Plus/Minus
                  CTCGGCTTCCCGT 13
Sbjct 3438094 CTCGGCTTCCCGT 3438082
>dbi|AK239914.1| Sus scrofa mRNA, clone:UTR010010G07, expressed in uterus
Length=912
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
            CTCGGCTTCCCGTGCAA 17
Sbjet 312 CTCGGCTTCCCGTGCAA 328
>dbj|AK231261.1| Sus scrofa mRNA, clone:ITT010025D10, expressed in intestine
Length=936
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbict 327 CTCGGCTTCCCGTGCAA 343
>dbj|AB121000.1| Callithrix jacchus gpxl mRNA for glutathione peroxidase 1, comp
cds
Length=606
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1 CTCGGCTTCCCGTGCAA 17
Sbjet 214 CTCGGCTTCCCGTGCAA 230
```

```
>dbj|AB120996.1| G Pan troglodytes gpx1 mRNA for glutathione peroxidase 1, compl
cds
Length=606
 GENE ID: 461015 GPX1 | glutathione peroxidase 1 [Pan troglodytes]
(10 or fewer PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1
              CTCGGCTTCCCGTGCAA 17
Sbjet 214 CTCGGCTTCCCGTGCAA 230
>emb|CT573213.2| Frankia alni str. ACN14A chromosome, complete sequence
Length=7497934
                                                                    Sort alignments for this
                                                                       E value Score Percen
                                                                       Query start position
 Features in this part of subject sequence:
   Glutathione peroxidase
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1
                   CTCGGCTTCCCGTGCAA 17
Sbjct 1918274 CTCGGCTTCCCGTGCAA 1918290
 Features flanking this part of subject sequence:
   93 bp at 5' side: Putative MarR-family transcriptional regulator
53 bp at 3' side: Putative transcriptional regulator
 Score = 26.3 bits (13), Expect = 636 Identities = 13/13 (100%), Gaps = 0/13 (0%)
 Strand=Plus/Plus
Ouerv 4
                  GGCTTCCCGTGCA 16
Sbict 641315 GGCTTCCCGTGCA 641327
 Features in this part of subject sequence:
   hypothetical protein; putative Amidohydrolase domain
 Score = 26.3 bits (13), Expect = 636 Identities = 13/13 (100%), Gaps = 0/13 (0%)
 Strand=Plus/Plus
Ouerv 3
                   CGGCTTCCCGTGC 15
Sbjct 1575841 CGGCTTCCCGTGC 1575853
>db-|AK225835.1| G Homo sapiens mRNA for Glutathione peroxidase 1 variant, clo
FCC127C01
Length=874
GENE ID: 2876 \text{ GPX1} \mid \text{glutathione peroxidase 1 [Homo sapiens]} (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
              CTCGGCTTCCCGTGCAA 17
```

```
Sbjct 223 CTCGGCTTCCCGTGCAA 239
>ref[XR_013650.1] EG PREDICTED: Macaca mulatta similar to Glutathione peroxidas
(GSHPx-1) (GPx-1) (Cellular glutathione peroxidase) (LOC706732),
mRNA
Length=811
 GENE ID: 706732 LOC706732 | similar to Glutathione peroxidase 1 (GSHPx-1)
(GPx-1) (Cellular glutathione peroxidase) [Macaca mulatta]
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbict 205 CTCGGCTTCCCGTGCAA 221
>db|CP000380.1| Burkholderia cenocepacia AU 1054 chromosome 3, complete sequen
Length=1196094
 Features in this part of subject sequence:
   Glutathione peroxidase
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
                CTCGGCTTCCCGTGCAA 17
Sbjct 632809 CTCGGCTTCCCGTGCAA 632825
>gb|AY966403.1| Callithrix jacchus cytosolic glutathione peroxidase (Gpx-1) mRNA
complete cds
Length=858
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1
             CTCGGCTTCCCGTGCAA 17
Sbict 237 CTCGGCTTCCCGTGCAA 253
>gb|CP000151.1| Burkholderia sp. 383 chromosome 1, complete sequence
Length=3694126
                                                               Sort alignments for this
                                                                  E value Score Percen
                                                                  Query start position
 Features in this part of subject sequence:
   Glutathione peroxidase
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
Query 1
                 CTCGGCTTCCCGTGCAA 17
Sbjet 2403347 CTCGGCTTCCCGTGCAA 2403331
 Features in this part of subject sequence:
   conserved hypothetical protein
 Score = 26.3 bits (13), Expect = 636 Identities = 16/17 (94%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
```

```
CTCGGCTTCCCGTGCAA 17
Query 1
Sbjct 3002445 CTCGGCTTCGCGTGCAA 3002429
>db|BC007865.2| LG Homo sapiens glutathione peroxidase 1, mRNA (cDNA clone MGC:
IMAGE: 4301275), complete cds
Length=851
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1 CTCGGCTTCCCGTGCAA 17
Sbjet 230 CTCGGCTTCCCGTGCAA 246
>db|BC000742.2|  Homo sapiens glutathione peroxidase 1, mRNA (cDNA clone MG
IMAGE: 3505654), complete cds
Length=863
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
           CTCGGCTTCCCGTGCAA 17
Sbjet 243 CTCGGCTTCCCGTGCAA 259
>db|BC070258.1| G Homo sapiens glutathione peroxidase 1, mRNA (cDNA clone MG
IMAGE: 6452792), complete cds
Length=866
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
            CTCGGCTTCCCGTGCAA 17
Sbjet 236 CTCGGCTTCCCGTGCAA 252
>gb|AY572225.1| Canis familiaris glutathione peroxidase 1 mRNA, partial cds
Length=434
 GENE ID: 442961 GPX1 | glutathione peroxidase 1 [Canis lupus familiaris]
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
            CTCGGCTTCCCGTGCAA 17
Sbjet 175 CTCGGCTTCCCGTGCAA 191
>qb|AC135371.2| AC135371.2 Homo sapiens X BAC RP11-142G7 (Roswell Park Cancer Institute
Human BAC Library) complete sequence
Length=25901
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Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Minus
              CTCGGCTTCCCGTGCAA 17
Sbjct 8993 CTCGGCTTCCCGTGCAA 8977
>qb|AY327818.1| G Homo sapiens glutathione peroxidase 1 (GPX1) gene, complete cd
Length=4877
 GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens]
(Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1
              CTCGGCTTCCCGTGCAA 17
Sbjet 2385 CTCGGCTTCCCGTGCAA 2401
>ref|NM_214201.1| Sus scrofa glutathione peroxidase 1 (GPX1), mRNA
 gb|AF532927.1| Sus scrofa cytosolic glutathione peroxidase (GPX1) mRNA, com
cds
Length=803
 GENE ID: 397403 GPX1 | glutathione peroxidase 1 [Sus scrofa]
(10 or fewer PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
             CTCGGCTTCCCGTGCAA 17
Sbjct 235 CTCGGCTTCCCGTGCAA 251
>dbj|AB120999.1| Cebus apella gpx1 mRNA for glutathione peroxidase 1, complete
Length=606
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbjct 214 CTCGGCTTCCCGTGCAA
>dbi|AB120998.1| Hylobates lar qpx1 mRNA for glutathione peroxidase 1, complete
cds
Length=606
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbjct 214 CTCGGCTTCCCGTGCAA
>dbj|AB120997.1| Pongo pygmaeus gpx1 mRNA for glutathione peroxidase 1, complete
Length=606
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
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Strand=Plus/Plus
Query 1 CTCGGCTTCCCGTGCAA 17
Sbjct 214 CTCGGCTTCCCGTGCAA 230
>gb|DQ333996.1| Spermophilus parryii clone SP00035 glutathione peroxidase 1 mRNA
partial cds
Length=210
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1 CTCGGCTTCCCGTGCAA 17
Sbict 65 CTCGGCTTCCCGTGCAA 81
>qb|M83094.1|HUMGLPEX  Homo sapiens cytosolic selenium-dependent glutathione
gene, complete cds, and rhohl2 gene, 3' end
Length=4407
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
               CTCGGCTTCCCGTGCAA 17
Sbict 2774 CTCGGCTTCCCGTGCAA 2790
>emb|Y00483.1|HSGSHPXG Luman gene for gluthathione peroxidase
Length=1733
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
            CTCGGCTTCCCGTGCAA 17
Sbict 687 CTCGGCTTCCCGTGCAA
>emb|Y00433.1|HSGSHPX  Human mRNA for glutathione peroxidase (EC 1.11.1.9.)
Length=1134
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1 CTCGGCTTCCCGTGCAA 17
Sbjet 532 CTCGGCTTCCCGTGCAA 548
>emb|X13710.1|HSPEROXP . H.sapiens unspliced mRNA for glutathione peroxidase
Length=1100
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
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Query 1 CTCGGCTTCCCGTGCAA 17
Sbjct 219 CTCGGCTTCCCGTGCAA 235
>emb|X13709.1|HSPEROXR G Human gpx1 mRNA for gluthatione peroxidase
Length=819
 GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens]
(Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
            CTCGGCTTCCCGTGCAA 17
Sbict 219 CTCGGCTTCCCGTGCAA 235
>ref[NM 001085444.1] COrvctolagus cuniculus glutathione peroxidase 1 (GPX1),
emb|X13837.1|OCGPO Rabbit mRNA for glutathione peroxidase (EC 1.11.1.9)
Length=760
GENE ID: 100009258 GPX1 | glutathione peroxidase 1 [Oryctolagus cuniculus] (10 or fewer PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbjct 229 CTCGGCTTCCCGTGCAA 245
>db/M21304.1|HUMGLP . GHuman clutathione peroxidase (GPX1) mRNA, complete cds
Length=856
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
           CTCGGCTTCCCGTGCAA 17
Sbjct 255 CTCGGCTTCCCGTGCAA 271
>gb|U39842.1|CPU39842 Cavia porcellus glutathione peroxidase mRNA, partial cds
Length=331
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbjet 112 CTCGGCTTCCCGTGCAA 128
>emb|CR626479.1| ... full-length cDNA clone CS0CAP001YI17 of Thymus of Homo sapi
(human)
Length=838
 GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens]
(Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
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Strand=Plus/Plus
Query 1 CTCGGCTTCCCGTGCAA 17
Sbjct 234 CTCGGCTTCCCGTGCAA 250
>emb|CR620255.1| 💹 full-length cDNA clone CS0DD004YA07 of Neuroblastoma Cot 50
of Homo sapiens (human)
Length=828
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
            CTCGGCTTCCCGTGCAA 17
Sbjct 243 CTCGGCTTCCCGTGCAA 259
>emb|CR614747.1|  full-length cDNA clone CS0DI086YP09 of Placenta Cot 25-norm
of Homo sapiens (human)
Length=849
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
              CTCGGCTTCCCGTGCAA 17
Sbjet 268 CTCGGCTTCCCGTGCAA 284
>emb/CR601795.11  full-length cDNA clone CS0DI068YJ17 of Placenta Cot 25-norm
of Homo sapiens (human)
Length=792
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
              CTCGGCTTCCCGTGCAA 17
Sbjct 188 CTCGGCTTCCCGTGCAA 204
>emb/CR595371.1| G full-length cDNA clone CS0DC025YE23 of Neuroblastoma Cot 25
of Homo sapiens (human)
Length=849
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%) Strand=Plus/Plus
Query 1 CTCGGCTTCCCGTGCAA 17
Sbjct 245 CTCGGCTTCCCGTGCAA 261
>dbi|AK130160.1| III Homo sapiens cDNA FLJ26650 fis, clone MPE04848, highly simi
```

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to Glutathione peroxidase (EC 1.11.1.9)
Length=863
GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens] (Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbjct 261 CTCGGCTTCCCGTGCAA 277
>qb|AC121247.2| Action | Homo sapiens chromosome 3 clone RP11-3B7, complete sequence
Length=170787
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
                CTCGGCTTCCCGTGCAA 17
Sbjct 22842 CTCGGCTTCCCGTGCAA 22858
>dbj|AB105162.1| Macaca fuscata mRNA for cytosolic glutathione peroxidase, compl
cds
Length=606
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
             CTCGGCTTCCCGTGCAA 17
Sbjct 214 CTCGGCTTCCCGTGCAA 230
>ref|NM_000581.2| Mag Homo sapiens glutathione peroxidase 1 (GPX1), transcript
1, mRNA
Length=921
 GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens]
(Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Query 1
             CTCGGCTTCCCGTGCAA 17
Sbjet 300 CTCGGCTTCCCGTGCAA 316
>ref|NM_201397.1| Mag Homo sapiens glutathione peroxidase 1 (GPX1), transcript
2, mRNA
Length=1200
 GENE ID: 2876 GPX1 | glutathione peroxidase 1 [Homo sapiens]
(Over 100 PubMed links)
 Score = 34.2 bits (17), Expect = 2.6 Identities = 17/17 (100%), Gaps = 0/17 (0%)
 Strand=Plus/Plus
Ouerv 1
            CTCGGCTTCCCGTGCAA 17
Sbjct 300 CTCGGCTTCCCGTGCAA 316
>qb|CP001111.1| Stenotrophomonas maltophilia R551-3, complete genome
```